

Gas platforms enrich nature

Removing obsolete gas platforms causes a loss of biodiversity, says a WUR study.

There are numerous gas platforms and wind turbines in the North Sea, and many more to come. International agreements demand that obsolete structures are removed, but special dispensation may be granted in certain circumstances. If the negative impact on nature is too severe, for example. This may apply to the remains of the Halfweg gas platform off the coast of Den Helder. There, 26 kilometres offshore at a depth of 25 metres, lies a gigantic slab of concrete on the seabed. It is the base of a platform where gas was extracted from 1995 to 2016. The platform itself was decommissioned last year, and all that remains is the foot and the surrounding bed of rocks. Owner Petrogas commissioned a WUR study to find out how removing it would affect nature.



Part of the overgrown base of the disused Halfweg gas platform. Photo Udo van Dongen, Bureau Waardenburg

Sea anemone

From a biodiversity perspective, the impact would be considerable, suggests the data collected by lead investigator Joop Coolen (Wageningen Marine Research). He and his team counted 65 species among the samples they collected from the remains of the platform. They estimate the true number to be 83 species, a few of which have not been sighted on reefs elsewhere in the North Sea. If only the concrete slab is removed, 44 of the 65 species counted will be left on the rock bedding. Coolen says most of these species are not rare. 'These are not endangered species. They are found on hard surfaces elsewhere in the North Sea too.

'Without these kinds of artificial hard substrates, the bottom of the North Sea would be much more barren'

The *Sabellaria spinulosa*, a honeycomb worm, is unusual, however. It is a reef-forming species that the EU requires us to protect.' In terms of numbers, the frilled sea anemones stand out, accounting for approximately 94 per cent of the biomass.

Oyster reef

Is all this sufficient reason to leave the platform where it is? Coolen believes so. 'I see it as a valuable addition to the ecosystem. Without these kinds of

artificial hard substrates, the floor of the North Sea would be a much more barren system. And let's not forget: 200 years ago, before industrial fishing, there were enormous oyster reefs here. The communities of species then were probably roughly the same as what we find now.' It is not yet known whether Petrogas will apply for an exemption from removing the remains of the platform. Coolen says costs are not the decisive factor. 'At least, that is what the company says. Removing such a structure is costly, and companies like this are often accused of failing to do so for financial reasons. However, Petrogas has said they will donate possible savings to science or charity.'^{RK}